

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/529,193
Source: PTI/10
Date Processed by STIC: 4/5/05

ENTERED



PCT

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/529,193

DATE: 04/05/2005
TIME: 13:38:12

Input Set : A:\pto_PB0262.txt
Output Set: N:\CRF4\04052005\J529193.raw

3 <110> APPLICANT: Loukola, Anu-Maria
 4 Penn, Sharron G.
 5 Rank, David R.
 6 Hanzel, David K.
 7 Casey, Graham
 8 Witte, John S.
 10 <120> TITLE OF INVENTION: Detection Methods
 12 <130> FILE REFERENCE: PB0262
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/529,193
 C--> 15 <141> CURRENT FILING DATE: 2005-03-24
 17 <150> PRIOR APPLICATION NUMBER: US 60/413,583
 18 <151> PRIOR FILING DATE: 2002-09-25
 20 <150> PRIOR APPLICATION NUMBER: US 60/491,842
 21 <151> PRIOR FILING DATE: 2003-08-01
 23 <160> NUMBER OF SEQ ID NOS: 45
 25 <170> SOFTWARE: PatentIn version 3.1
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 201
 29 <212> TYPE: DNA
 30 <213> ORGANISM: Homo sapiens
 32 <220> FEATURE:
 W--> 33 <221> NAME/KEY: SNP
 34 <222> LOCATION: (101)..(101)
 35 <223> OTHER INFORMATION: Alternative allele: G.
 38 <400> SEQUENCE: 1
 39 atgagaattt ctgccacata gcagaacgac acatgttga atgttataag tggtagttgg 60
 41 aggcactttc tagaggcatg caggcataga tagccatgtt ctaagagtaa agggcaaccc 120
 43 taagcaaacc tggcatgcta gaaagtcatg ctgcggctcg tggatcacct acatcagatc 180
 45 aaatgccaat tctcagcctc c 201
 48 <210> SEQ ID NO: 2
 49 <211> LENGTH: 201
 50 <212> TYPE: DNA
 51 <213> ORGANISM: Homo sapiens
 53 <220> FEATURE:
 W--> 54 <221> NAME/KEY: SNP
 55 <222> LOCATION: (101)..(101)
 56 <223> OTHER INFORMATION: Alternative allele: T.
 59 <400> SEQUENCE: 2
 60 ttagatagaaggc caggcttc acctttgcag aaggaggatca tggattcaga aaggaggaaaa 60
 62 actagcatga atcctatgaa attagattgg aatggatgtt accgtgtata ttcataccct 120
 64 tgtatagataga tagatggta gatagatgtt agataggtaa cagatagatg acagataatg 180
 66 agatagatag atgtaaaatgt a 201
 69 <210> SEQ ID NO: 3

P.6

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/529,193

DATE: 04/05/2005

TIME: 13:38:12

Input Set : A:\pto_PB0262.txt
 Output Set: N:\CRF4\04052005\J529193.raw

70 <211> LENGTH: 201
 71 <212> TYPE: DNA
 72 <213> ORGANISM: Homo sapiens
 74 <220> FEATURE:
W--> 75 <221> NAME/KEY: SNP
 76 <222> LOCATION: (101)..(101)
 77 <223> OTHER INFORMATION: Alternative allele: T.
 80 <400> SEQUENCE: 3
 81 ggcaggagaa tcacttgaac ctgggaggcg gatgttgaag tgagctgaga ttgcaccact 60
 83 gcactccagt ctgggtgaga gtgagactca gtctaaaaaa aatatgcctt tttgaagcac 120
 85 gtacattttg taacaagaa ctgaagctct tattatatta ttagtttga tttaatgttt 180
 87 tcagcccatc tccttcata t 201
 90 <210> SEQ ID NO: 4
 91 <211> LENGTH: 201
 92 <212> TYPE: DNA
 93 <213> ORGANISM: Homo sapiens
 95 <220> FEATURE:
W--> 96 <221> NAME/KEY: SNP
 97 <222> LOCATION: (101)..(101)
 98 <223> OTHER INFORMATION: Alternative allele: G.
 101 <400> SEQUENCE: 4
 102 aagtccaccag aaagtccagaa gggatgacat gcagaggccc agcaatctca gctaagtcaa 60
 104 ctccaccaggc ctttctagtt gcccactgtg tgtacagcac cctggtaggg accagagcca 120
 106 tgacagggaa taagactaga ctatgccctt gaggagctca cctctgttca gggaaacagg 180
 108 cgtggaaaca caatgggtt a 201
 111 <210> SEQ ID NO: 5
 112 <211> LENGTH: 201
 113 <212> TYPE: DNA
 114 <213> ORGANISM: Homo sapiens
 116 <220> FEATURE:
W--> 117 <221> NAME/KEY: SNP
 118 <222> LOCATION: (101)..(101)
 119 <223> OTHER INFORMATION: Alternative allele: T.
 122 <400> SEQUENCE: 5
 123 ctgttagtcca atagataaag gcaaagagat tagggcattt aattttgttc cttttatcct 60
 125 tcaaaaagatg cacaaggggc tgctgatctc actgctgtag cggtgctct tatgcataga 120
 127 cctgcccctt ctcagccact ggcctgaaag aggggcaaaa gtcatagaag gaatggctc 180
 129 cagttgagaa ccttgatgtc t 201
 132 <210> SEQ ID NO: 6
 133 <211> LENGTH: 201
 134 <212> TYPE: DNA
 135 <213> ORGANISM: Homo sapiens
 137 <220> FEATURE:
W--> 138 <221> NAME/KEY: SNP
 139 <222> LOCATION: (101)..(101)
 140 <223> OTHER INFORMATION: Alternative allele: C.
 143 <400> SEQUENCE: 6
 144 gaacttattgg aactgataaa cacattcagt aaagttgcag gataaaaaat cagcatacaa 60
 146 aaatcagtag catttctata tgccaatagt gaacaatctg gcaaaaataa aaaagtaatc 120

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/529,193

DATE: 04/05/2005
TIME: 13:38:12

Input Set : A:\pto_PB0262.txt
Output Set: N:\CRF4\04052005\J529193.raw

```

148 ccatttacaa tagccacaaa taaaactaaa tacctagaaa ttaacttaat caaagaagag      180
150 aaaggctctc acaatgaata c                                201
153 <210> SEQ ID NO: 7
154 <211> LENGTH: 201
155 <212> TYPE: DNA
156 <213> ORGANISM: Homo sapiens
158 <220> FEATURE:
W--> 159 <221> NAME/KEY: SNP
160 <222> LOCATION: (101)..(101)
161 <223> OTHER INFORMATION: Alternative allele: T.
164 <400> SEQUENCE: 7
165 ataagtcat cagtatccac aacacttgg a gagaattcaa gagtgattt aaatttcct      60
167 ttccaaatac ctcctctgtt ttctcttatt tcctttatga cgtctccaaa taagcttcct    120
169 ctaactgcca gcaagtctga ttcattggc ttgcactgtt ttcatccaa ttagaggcag     180
171 ggtaaagtac attaaaaata a                                201
174 <210> SEQ ID NO: 8
175 <211> LENGTH: 201
176 <212> TYPE: DNA
177 <213> ORGANISM: Homo sapiens
179 <220> FEATURE:
W--> 180 <221> NAME/KEY: SNP
181 <222> LOCATION: (104)..(104)
182 <223> OTHER INFORMATION: Alternative allele: T.
185 <400> SEQUENCE: 8
186 aactgcccct aggatccaat catctcctac caggccccac ctccagtatt gggattgca      60
188 ttcaacatcg agattttgtt aggggcacag attcagacca tatcactggc actgtgctaa    120
190 tcaatgtat atcaccagtt ggaaggctag attccacaag aggaggaatg acctggaaat   180
192 tgttcttta gttgtattc t                                201
195 <210> SEQ ID NO: 9
196 <211> LENGTH: 201
197 <212> TYPE: DNA
198 <213> ORGANISM: Homo sapiens
200 <220> FEATURE:
W--> 201 <221> NAME/KEY: SNP
202 <222> LOCATION: (100)..(100)
203 <223> OTHER INFORMATION: Alternative allele: T.
206 <400> SEQUENCE: 9
207 ggggtccccct tgccaaacaga atcacagagg accagcctga aagtgcagag acagcagctg    60
209 aggcacagcc aagagctctg gctgtattaa tgacctaaaga agtcaccaga aagtcaag        120
211 gatgacatcg cagagccca gcaatctcg ctaagtcaac tccaccagcc ttcttagtt      180
213 cccactgtgt gtacagcacc c                                201
216 <210> SEQ ID NO: 10
217 <211> LENGTH: 201
218 <212> TYPE: DNA
219 <213> ORGANISM: Homo sapiens
221 <220> FEATURE:
W--> 222 <221> NAME/KEY: SNP
223 <222> LOCATION: (101)..(101)
224 <223> OTHER INFORMATION: Alternative allele: base deleted.

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/529,193

DATE: 04/05/2005
TIME: 13:38:12

Input Set : A:\pto_PB0262.txt
Output Set: N:\CRF4\04052005\J529193.raw

227 <400> SEQUENCE: 10
228 tcaggcacag tggctcacgc ctgtaatcct agcagttgg gaggctgagc cgggtggatc 60
230 gcctgaggtc aggagttcaa gacaagcctg gcctacatgg ttgaaacccc atctctacta 120
232 aaaatacaca aattagctag gcatggtgg a ctcgcctgta atctcactac acaggaggct 180
234 gaggcaggag aatcacttga a 201
237 <210> SEQ ID NO: 11
238 <211> LENGTH: 201
239 <212> TYPE: DNA
240 <213> ORGANISM: Homo sapiens
242 <220> FEATURE:
W--> 243 <221> NAME/KEY: SNP
244 <222> LOCATION: (101)..(101)
245 <223> OTHER INFORMATION: Alternative allele: T.
248 <400> SEQUENCE: 11
249 tgggtgtggg agtccaagca agcagagaag gggtcgacgc agaggggtgg cttgcaagag 60
251 cagccagagc ctaaataggg tatggagaac ccacatgagg cgaggagggc atccatgagt 120
253 ggagggggtt gggtaggtt tggctacata aaggggattt atcaaataag taaatgtatt 180
255 aaggatgata gaagccaggc t 201
258 <210> SEQ ID NO: 12
259 <211> LENGTH: 201
260 <212> TYPE: DNA
261 <213> ORGANISM: Homo sapiens
263 <220> FEATURE:
W--> 264 <221> NAME/KEY: SNP
265 <222> LOCATION: (101)..(101)
266 <223> OTHER INFORMATION: Alternative allele: C.
269 <400> SEQUENCE: 12
270 ttgcatttct ctaatgacca gtgatgatga gcatttttc acatgtctgt tggctgcata 60
272 gatgtcttct tttgagaagt gtctgttcat atccttgcc tatttttga tgggttggtt 120
274 tgctttttt cttgtaaatt tggtaagg tttgttagat tctggatgtt agcccttcgt 180
276 cagatggata gattgaaaa a 201
279 <210> SEQ ID NO: 13
280 <211> LENGTH: 201
281 <212> TYPE: DNA
282 <213> ORGANISM: Homo sapiens
284 <220> FEATURE:
W--> 285 <221> NAME/KEY: SNP
286 <222> LOCATION: (101)..(101)
287 <223> OTHER INFORMATION: Alternative allele: G.
290 <400> SEQUENCE: 13
291 taactattgg ttcttagagag caggactgg cttactccag catactgctt taaatatatac 60
293 catgtctaca tccacttttgc tctgtatgtc tatgtatcta tctatgtatc tatctagcta 120
295 tggatctatc tatctatcta tctatcatct atctatctat ctatcatcta tccatctatc 180
297 atctatcatcatt tatccatcta t 201
300 <210> SEQ ID NO: 14
301 <211> LENGTH: 201
302 <212> TYPE: DNA
303 <213> ORGANISM: Homo sapiens
305 <220> FEATURE:

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/529,193

DATE: 04/05/2005

TIME: 13:38:12

Input Set : A:\pto_PB0262.txt
 Output Set: N:\CRF4\04052005\J529193.raw

W--> 306 <221> NAME/KEY: SNP
 307 <222> LOCATION: (101)..(101)
 308 <223> OTHER INFORMATION: Alternative allele: G.
 311 <400> SEQUENCE: 14
 312 ctccccatct ttacactgga tgggttcaat tgggaggaat tactggactc tggaaaggta 60
 314 agactgtcca tataattaaa atgtacaata actaccagg ttacacctgc aagttcaac 120
 316 atacacaaaaa ttaactttat atgactcttc aaaaacagtt tgccatcatata cctaataatc 180
 318 tggtttaaat tttaaaaact c 201
 321 <210> SEQ ID NO: 15
 322 <211> LENGTH: 201
 323 <212> TYPE: DNA
 324 <213> ORGANISM: Homo sapiens
 326 <220> FEATURE:
 W--> 327 <221> NAME/KEY: SNP
 328 <222> LOCATION: (101)..(101)
 329 <223> OTHER INFORMATION: Alternative allele: T.
 332 <400> SEQUENCE: 15
 333 tgcccagagt gtggctttaa aagcttcccc attgcttctc atgtgaagcc aagggttgaga 60
 335 atgactaatt taaggcattt ctgggtggata taaaggacta ccacagtcca agggcatcct 120
 337 gactgacctc accttccagg tgccttagctc catccagctg ggctcctttt caacccaatt 180
 339 ataactctat taatgttgg t 201
 342 <210> SEQ ID NO: 16
 343 <211> LENGTH: 201
 344 <212> TYPE: DNA
 345 <213> ORGANISM: Homo sapiens
 347 <220> FEATURE:
 W--> 348 <221> NAME/KEY: SNP
 349 <222> LOCATION: (101)..(101)
 350 <223> OTHER INFORMATION: Alternative allele: A.
 353 <400> SEQUENCE: 16
 354 agagtgtggc tttaaaagct tccccattgc ttctcatgtg aagccaagggt tgagaatgac 60
 356 taatttaagg catttctgggt ggatataaag gactaccaca gtccaaggcc atcctgactg 120
 358 acctcacctt ccaggtgcct agctccatcc agctgggctc cttttcaacc caattataac 180
 360 tctattaatg ttgttcccag c 201
 363 <210> SEQ ID NO: 17
 364 <211> LENGTH: 201
 365 <212> TYPE: DNA
 366 <213> ORGANISM: Homo sapiens
 368 <220> FEATURE:
 W--> 369 <221> NAME/KEY: SNP
 370 <222> LOCATION: (101)..(101)
 371 <223> OTHER INFORMATION: Alternative allele: A.
 374 <400> SEQUENCE: 17
 375 taatttaagg catttctgggt ggatataaag gactaccaca gtccaaggcc atcctgactg 60
 377 acctcacctt ccaggtgcct agctccatcc agctgggctc cttttcaacc caattataac 120
 379 tctattaatg ttgttcccag ccaggcatgg tggctcatgc ctgtaatccc agcactttgg 180
 381 gagggccgaag caggccgatc a 201
 384 <210> SEQ ID NO: 18
 385 <211> LENGTH: 201

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 04/05/2005
PATENT APPLICATION: US/10/529,193 TIME: 13:38:13

Input Set : A:\pto_PB0262.txt
Output Set: N:\CRF4\04052005\J529193.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:39; N Pos. 37334

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/529,193

DATE: 04/05/2005
TIME: 13:38:13

Input Set : A:\pto_PB0262.txt
Output Set: N:\CRF4\04052005\J529193.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application Number
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:33 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1
L:54 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:2
L:75 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3
L:96 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:4
L:117 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:5
L:138 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:6
L:159 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7
L:180 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:8
L:201 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:9
L:222 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:10
L:243 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:11
L:264 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:12
L:285 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:13
L:306 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:14
L:327 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15
L:348 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16
L:369 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:17
L:390 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:18
L:411 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19
L:432 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:20
L:453 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:21
L:474 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:22
L:495 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:23
L:516 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:24
L:537 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:25
L:558 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:26
L:579 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:27
L:600 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:28
L:621 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:29
L:642 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:30
L:661 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:31
L:680 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:32
L:701 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:33
L:722 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:34
L:743 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:35
L:768 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:36
L:2066 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:37320
L:5597 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:42
L:5622 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:43
L:5647 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:44
L:5675 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:45